

# AMERICAN EDUCATIONAL MONTHLY.

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JANUARY, 1874.

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## *THE SPORTS AND CONTRIVANCES OF ANIMALS.*

THE great Creator has taught us a lesson in the habits and dispositions with which he has endowed the lower orders of animals. They are all so constituted that they have their seasons of play and frolic; and though, to the domesticated animals, life is, on the whole, a serious business, and they have their treadmill round of duties to perform, yet even these indulge, at times, in their fondness for sport and relaxation. Who has not seen the old farm horse, or the still harder worked stage or dray horse of the city, when released from his harness and his work, running, throwing up his heels, rolling, and in every way manifesting his delight as clearly as the idle school boy does when released from school? Even "the sober kine," as Thomson calls them, those great sad-faced cows of Durham or Hereford stock, who so patiently and quietly chew the cud, and seem incapable of anything like play, will, upon occasion, gambol and frolic over their hillside pastures, and demonstrate that years of quiet life and the demands of the farmer's dairy, have not caused them to forget all their youthful love of fun. Sheep and goats are proverbially fond of sport. The sheep is so timid a creature, that in its frolicsome moods it rather shuns human observation; but when

it deems itself secure from this, it is full of its gambols. The goat combines with its love of fun, a strong tendency to mischief and a dogged perseverance and pertinacity. When it has set its heart on accomplishing some piece of mischief, it returns to the work most persistently, not discouraged by a hundred failures. We recollect one instance of this which occurred more than thirty years ago in Washington, and to which we were an eye-witness. A goat kept in one of the stables near Pennsylvania Avenue, had the habit of butting at anything which offended his æsthetic sense by being of a scarlet or crimson color; and this was not so much the consequence of rage at the color, as of his love of fun. One day, Henry Clay, then in the zenith of his power and reputation, came up the avenue, dressed in his usual winter walking suit, viz., a snuff-colored surtout, reaching to his heels, from one of the skirt pockets of which protruded the end of a red silk bandanna handkerchief, such as he always carried. The young street Arabs, ever on the alert for fun, had the goat out, and turning his head so that he could see the handkerchief, let him loose. He went directly for the statesman, and in a twinkling laid him at full length on the sidewalk. Somewhat jarred and stunned by the suddenness of the blow, Mr. Clay yet sprang nimbly to his feet, and as the goat returned to the charge, caught him by the horns and held him. The awkwardness of this position was soon evident to all parties, the goat included, and Mr. Clay's quick wit was for once at fault. He appealed laughingly to the boys, who had gathered around, and whose twinkling eyes showed that they fully enjoyed the scene; "Boys," he said, "what had I better do? I can't hold on, here, all day, and if I let go the goat will come at me again." "Let go and run like the devil," shouted one of the older boys. Mr. Clay followed the advice, and the goat, when released, drew himself up, looked rather disdainfully at the crowd, shook his head ominously, and then trotted off to his stable. He had had his fun, and did not care for more that day.

The swine, in the domesticated state, is usually too gross and fat for any great sportiveness; but occasionally we see some manifestations of it in the younger animals, but almost

always mingled with perversity and pertinacity. Even the swinish features are sometimes lighted up with a sort of sensuous joy, when piggie has carried his point.

Dogs, of all varieties, are fond of frolic. The stately greyhound, or the gigantic Newfoundland and Shepherd's dogs descend from their dignity, not as often perhaps, but in as marked a degree, as the spaniel, the sharp little terrier, the quick-witted black-and-tan, the helpless poodle, or the graceful but mischievous Spitz dog. A friend of ours, who is very fond of dogs, insists that there are some varieties of dogs who can not only take and understand a joke, but who delight to play off practical ones on their acquaintances. We are inclined to believe he is more than half right. We do know that some of the most intelligent varieties, such as the shepherd's dogs, the rat terriers, and perhaps some of the spaniels, do play off practical jokes on each other, and evidently enjoy the surprise and dismay of their fellows when they have found themselves fooled. We are not prepared to say that this is not a lesson in depravity they have learned from man; but we very earnestly counsel all good dogs who may read this article, not to indulge in so demoralizing a habit. For the most part, however, the sportiveness of dogs is entirely innocent and harmless, and not intentionally mischievous or destructive. We remember, indeed, to our sorrow, having a choice silk vest dragged in the dust from the house to his kennel, and chewed up till it was past identification by a mischievous puppy, and several pounds of paints in the dry state thoroughly mixed with the soil by the same frolicsome little rascal, but the frank, honest look of his hazel eyes as he contemplated the mischief he had wrought, satisfied us that he had been entirely free from any malicious intent. The deep remorse and consciousness of guilt manifested by some of these animals when they have failed to perform what they have been taught to regard as their duty, or been led from any cause to neglect it, are so marked, as to teach us a lesson of conscientiousness in our own performance of duty.

The feline race, both the wild and domesticated animals, are very fond of sport and frolic. This disposition is so manifest in the domestic cat, that no one can have failed

to notice it. The frolicsomeness of young kittens, their hearty play with each other, and their proclivity for every description of mischief, are too well known to require remark. But this frolicsomeness is not confined to the young; how often have we seen a staid and demure old puss, half conscious that she was compromising her dignity, engaging in a frolic with her kittens, and presently, as if feeling that she had sacrificed too much of her prestige, administering a sound cuff or two to the daring little offenders, and anon, compensating for it, mother-like, by her pretended bites and caresses.

But this fondness for sport and frolic is equally characteristic of the other felines as of the domestic cat. Gordon Cumming, Gerard and Livingstone all speak of the gambols and playful frolics of the lioness and her cubs; and the tiger, the leopard, and on our own continent,\* the cougar, the jaguar, the ocelot, the panther, lynx and wild cat, all manifest the same disposition to playfulness. We are not so certain that certain acts of the felines, which are usually called play, really belong to the class of sportive acts. We refer to that disposition common to all this family of animals, the habit of playing with their victims. A cat captures a mouse or a squirrel, and after wounding and terrifying it, will let it go to a little distance, carefully keeping it within her reach, and restraining it when it attempts to escape, by a blow from her paw, and after perhaps half an hour of this torture, (unless she happens to be very hungry,) she suddenly dispatches it by a bite at the throat or across the back of the neck. The larger *Felidæ*, as the lion, tiger, leopard, cougar, or jaguar, will treat larger animals in the same way, and some of them practice it on the human subjects which fall in their way. The nature of these animals is cowardly and blood-thirsty, and many writers have supposed that this act was one of a cruel and torturing sport, in keeping with their nature. We do not regard it in that light. They invariably go through this exercise, except when they are intensely hungry; then they spring upon their prey, and destroy and eat it at once; and as a result of considerable and careful observation, we are inclined to believe the act purely instinctive. This attempt



of the victim to escape, so repeatedly baffled and so often repeated, while it does not seem to add to the terror of the victim, produces a change in the character of the flesh and the fluids of the body, and renders it more palatable and toothsome to these epicures and gourmands of the animal kingdom, and by more readily satiating their appetite, prevents a wider and more general destruction of the animals which form their prey. We are not at liberty to assign to the acts of animals a motive which would imply a cruelty and depravity which is the sad heritage of the human family only. Under certain circumstances, as for instance those lions, tigers, jaguars, etc., which have tasted human flesh, and are called man-eaters, the destructive impulse seems to predominate, and they never play with their victims, and but seldom eat them, satisfying themselves with a single bite at the throat and the drawing a liberal draught of blood. But this is an acquired, not to say a depraved, taste, and the cases in which it occurs are but few.

The performance illustrated in our frontispiece belongs rather to the contrivances than the sports of animals. The trick, though not so fully authenticated as some of its class, is yet probable enough; a jaguar, with a taste for fish, takes his station on a limb of a low, spreading tree, which overhangs and nearly touches the water, and allowing the end of his tail to dip in the water, moves it gently to attract the fish, which he strikes and secures with his outstretched paw, the moment it approaches within reach. The dislike which all the *Felidae* have to wetting their feet is all that renders the story doubtful. It is analogous in character to the well known device of the fox, to cover himself with leaves, letting his fine brush alone stand out to attract partridges or grouse, and when their curiosity leads them to examine it, securing them by a sudden blow with his paw. Several animals, like the aye-aye, delude their prey by peculiar and unusual cries, or by some devices which seem almost human in their ingenuity. Others, like the common rat, are equally ingenious in their contrivances to procure and store their food. Others still, like some of the birds, are remarkably shrewd in their plans to thwart the vigilance and craft of their enemies.

But to return to the sports of animals. Nearly all the wild animals have their "play-spells." Some families, as the rodents generally, and the various genera and species of the quadrumana or monkey tribe being most conspicuous for their sportiveness, and these sometimes—oftener, we think, among birds than quadrupeds—degenerate into sharp and violent quarrels. The pert little English sparrows, now so common in our cities, are wont on almost every occasion when they have a "sociable," to break up with a row, as a result of which some poor fellow gets sent to Coventry. All his fellows are down on him, and with shrill shrieks drive him off in a sadly battered and dilapidated condition. With the quadrupeds, generally, there is more harmony. Some of the monkeys are, indeed, quarrelsome, but on Darwinian principles, this should perhaps be ascribed to the infirmity of poor human nature. The social gatherings of the gophers or prairie dogs, and those of the squirrels, are a very pleasant sight. The sharp, shrewd little faces seem full of happiness, and remind one irresistibly of a gathering of newsboys, or Howard Mission children, on a summer picnic.

The poets, those shrewd observers of nature, have not failed to notice these sportive propensities of the animal creation, and have often alluded to them, sometimes by way of illustration, and sometimes as teaching a higher lesson of trust and confidence in God. The old hymn writers, Sternhold and Hopkins, call upon them, in quaint and not very melodious verse, to praise God in their demonstrations of joy.

"Ye monsters of the bubbling deep,  
Your Maker's praises shout;  
Forth from the sands, ye codlings, peep,  
And wag your tails about."

Pope has frequent allusions to these playful demonstrations; in one, he illustrates by it our blindness to the future:

"The lamb thy riot dooms to bleed to-day;  
Had he thy reason, would he skip and play?  
Pleased to the last, he crops the flowery food,  
And licks the hand just raised to shed his blood."

The more modern poets have been still more profuse in their references to the sport and craft of the lower animals, and in the pages of Wordsworth, Cowper, Tennyson, Scott, Longfellow and Whittier, we find them in such numbers that we cannot do more than merely refer our readers to them. But we began by saying that our Creator taught us a lesson in this joyous sportiveness of the Animal Creation. It is, that with our toil there should be mingled entire relaxation and rest; that the wearied brain, the toil-worn hands, the limbs stiffened by labor, should have their seasons of relief from carking care, and from that benumbing weariness of body and mind, which takes away all the joy and comfort of living. To those who heed that lesson, there will come a renewed youth, a buoyancy of spirit, and a cheeriness in the hours of toil, which cannot be otherwise attained.

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## *MINERAL SUBSTANCES AS AIDS TO EDUCATION.*

### II.

HOW A SELECTED SERIES OF MINERAL SUBSTANCES MAY BE USED FOR INSTRUCTION IN OUR COMMON SCHOOLS.

MANY school-teachers appear to entertain the idea that their very position as teachers absolves them from all necessity of pursuing any new studies; that, the allotted hours of school work over, the rest of the day may be given to employments totally foreign to their profession, and that even intellectual reading is in their case an uncalled-for occupation. Hence it is that we find so many amongst those professedly educating others, who are themselves but very partially educated, so many professedly cultivating the intellects of the young who are themselves very deficient in intellectual culture. Such persons ignore the fact that true self-education remains to be accomplished after the graduating class has been left;—that if they wish to become effective trainers of others, or if they desire to take rank as educated and cultured members of society, they must retain and confirm the habits of study acquired

when pupils. The great educational value of a taste for scientific pursuits, as we have hinted before, lies in the fact that such a taste promotes a habit of study and a constant seeking after more knowledge and new ideas. A very little sound scientific knowledge leavens, to his great advantage, a man's entire life. The scientific man is seldom idle; his leisure hours are spent in congenial society in which the discussion and interchange of new views improve all who take a part, and his vacations are to him a valued time, wherein he stores up a fresh stock of material for thought, material to be wrought up not merely for his own amusement, but ultimately to be applied to the enlightenment and profit of others. A spirit of research has become so habitual to him, that so far from finding enquiry and study irksome, he feels that his mind is stagnating if placed in circumstances which altogether forbid these pursuits. I do not wish to claim for scientific pursuits an exclusive merit in this respect, but I do think that of all classes teachers should be the last to give up, as so many do, all habits of either literary or scientific study.

I pen these lines because I have found, that one of the first objections made to the introduction of scientific training into our common schools is embodied in the remark, "that the teachers will not take the trouble to master such new studies." I believe myself that the principals have it greatly in their power to amend this; in the first place by setting an example to their subordinates; and, secondly, by giving them to understand that as the public begins to demand this improved instruction, the teachers must, whether they like it or not, qualify themselves to give it;—this expression of opinion being accompanied by the promise of every encouragement and facility to enable them to attain the needed qualifications. Let two or three teachers in a school, or in adjoining schools, club together to study minerals; others, to study plants; others yet again, to study animals, or physiology, or some other science, and in friendly rivalry and with mutual assistance, they will find their tasks made much more easy and pleasant; whilst the schools themselves will, I venture to say, soon show a marked improvement in their entire character. Nor let the

reader imagine that these remarks are aside from my subject, since in order to use mineral substances as objects for instruction, it is in the first place essential that the instructor be thoroughly informed as to the nature of these objects and of their latent capabilities of imparting and impressing knowledge and training.

The very first point of my present subject then is naturally, how may the teacher best acquire a knowledge of mineralogy and geology sufficient for his purpose? The task I admit at once is neither an easy nor a very brief one; especially under the circumstances that ordinarily surround the teacher. Nine teachers out of ten are placed out of the reach of much scientific instruction, whilst many, who would very willingly follow up the subject if once started on the right road, have not the chance of oral aid in even the very first steps. The field is to them altogether a new one, they have no idea how to set out on a study in which their only text-book is the book of nature, printed works being but the dictionaries they will have to use in reading it. It is, I again say to you, neither an easy nor a brief task, but for this very reason you will find it a most improving one; the very mental training you propose to give the children, you will have to submit to yourself, with this advantage that you will be your own trainer. I say advantage, because wholesome discipline self-imposed is far more effective and beneficial in the end than that enforced by others.

Your first enquiry will probably be, "What text-book shall I obtain?" My reply, as indicated above is, that your text-book must be in the first part, a judiciously selected collection of minerals, and in the second, the rocks and stones, and natural processes going on around you. To interpret these, you may, to commence with, take Dana's Manual of Mineralogy and Dana's Manual of Geology, with other works for reference and for reading, that I shall mention below. These on examination will probably appear to you about as entertaining as a Greek Lexicon; and in truth you might almost as profitably undertake to read through the latter without having some work to translate before you, as to study the former without first fixing your attention upon the natural objects of which they treat.



Now with regard to the first part of your text-book. You will note that I have laid stress on the fact that the series of mineral substances from which you are to receive, and afterwards to impart instruction, should be a "selected" one. You must understand that the expression, that this series is to serve you in the place of a book, is a literal and not a figurative statement. The specimens are the words,—their characters are the letters that compose these words; but the language possesses this peculiarity, that the same words, arranged into a sentence may convey several meanings according to the spirit of your interpretation. Thus several associated together may give you a paragraph on the economical application of mineral substances, or, read differently, will describe a phase of geological history. An example of this diversity of meaning, attaching to the same natural terms, is seen in a series of the different carbonaceous substances, commencing with peat and ending with graphite. You may regard such a series as illustrations of fuels and their nature, or you may study them as illustrations of geological phenomena. You may thus read them as a chapter on our mineral resources or as pages from the history of the earth. Your entire series then is to all intents and purposes a book, of few words it is true, but susceptible of many interpretations all alike correct; and as almost any one can write a book, so almost anybody could put you together a series of minerals. Nay, a skillful mineralogist or geologist could put together for you very beautiful and extensive works, such as you see in large museums, but these would not in either case be suited to your wants. The one would give you an admirable and complete natural treatise on Mineralogy; the other an extensive work on Systematic Geology. But the crystals in the one collection and the fossils in the other, would be equally beyond your purpose. You require an abstract of such collections, expressed in simpler terms, that is to say you want fewer and plainer specimens such as the regular collector would hardly covet; but on the other hand, you want these very carefully chosen and arranged according to a definite and well digested system. Every specimen must have certain characters well marked and must be chosen to make sense with

the rest of the series. Such a work can only be compiled for you by some one, who has not merely a sufficient knowledge of minerals, but who is equally conversant with the especial requirements, limits and ultimate objects of this course of instruction; by some one in fact who is himself competent to use such a case effectively after he has arranged it.

You may already have in your school a collection of minerals; if such is the case, find some one, if possible, to pick out for you from them a "First Book on Mineral Substances." Should you attempt to use them, without submitting them to such a systematizing process, you will infallibly waste a great deal of valuable time, and will probably be doomed after all to experience a total want of success. Your best plan is in all cases to obtain a small collection, especially prepared for this purpose, and having mastered this you will be able to add to it, or even if you see fit, to improve upon it, as you can obtain additional specimens. During the present winter months you can make yourself familiar with the lessons in this first part of your text-book, and you will thus efficiently prepare yourself for studying, when the spring comes, the second, or what we may call the out-of-door part of the course.

We will suppose that your principal has ordered for you such a collection as is suitable for your purpose; you need not defer till its arrival the commencement of your studies. You can begin at once a preface to the work by using your eyes and thoughts. Seek a subject. What kind of one do you require? You want a *natural* object and not an *artificial* one, a *lifeless* and not a *living*, an *inorganic* and not an *organic* subject. I am using these terms under the impression that you can at once indicate to yourself objects to which they apply. "Inorganic or organic;" you are not very clear about these, the ideas they call up in your mind are not very precise. Stop! do not turn to Webster or to Worcester for "a definition;" you do not want to substitute phrases for words, you want ideas based on your perceptions. I infer from your hesitation that your ideas of "living" and of "life" are not well developed. What is the essential character of a living object? You need not think

of an animal or a plant that stands high in the scale of existence; there are animals, limbless, mouthless, stomachless, and wanting all signs of special sense, mere animated lumps of jelly, and there are plants leafless, stemless, rootless, consisting but of a single cell. In what does the vital character of such low forms consist? Wherein do they essentially differ from an inanimate group of crystals?

Every living substance, no matter how simple, by virtue of a force inherent within it, is always undergoing change, constantly absorbing new matter from without, and casting off worn-out matter from within; when it absorbs more than it gives off, it "grows;" when it ceases to absorb at all, it "dies," and then it breaks up altogether or "decomposes." Now a crystal or a group of crystals or any substance, not endowed with life, never accomplished any thing akin to this constant self-change. Stones, therefore, can never be said to grow,—a crystal or a stalactite may increase in size, but it does so by additions from without and not by virtue of any power inherent in itself. A substance which is living may perform much more than the simple vegetative "function" of growth, it may move, feel, think and so forth, but whatever it does, it accomplishes by means of parts specialized for the purpose, parts which are termed *organs*; whence we have the terms *organism* for the entire individual made up of organs, and *organic* applied to any thing belonging to or produced by an organism. An organism and organic structures may continue to exist for some time after death, and many organic products, as gum for instance, can not be said to have ever been "living." Now exercise yourself upon the use of these terms by applying them to objects around you; the table, the stove, the tree, the sugar on the table and the bone or the oyster by the roadside. Which, or what parts of each, are natural or artificial? which organic or inorganic? With this prefatory understanding, you are now more prepared to select an object for a first lesson:—it must be one that is *natural* and *inorganic*, or in other words, it must belong to the "mineral kingdom."

Let me suggest to you a most excellent subject, and a very common one, though probably you would hardly

think of it in this connection,—ICE. "Ice! a mineral substance? Then water must be so likewise? and air?" Certainly they are. And now let us examine this mineral substance. It is in the "solid" condition; its color, it is "colorless;" its power of reflecting light, or *lustre*, is like that of glass, call it "glassy" or "vitreous;" its *diaphaneity*, or power of transmitting light, is very perfect, it is in fact, "transparent." Now try how hard it is, you can scratch it with your nail, it is therefore not very hard, its relative hardness you will determine by-and-by. Try to cut it, it is somewhat sectile. Break it; it breaks with smooth, slightly convex and concave surfaces,—its *fracture* is therefore said to be "conchoidal." You find that it is melting in your hand, its melting point or degree of fusibility is therefore very low. Here then you have enumerated the physical character of this substance that distinguish it from all other substances, and that yet are observable with the least attention. Take your piece of ice and go over these characters again by yourself, and then set them down in regular order in your note-book. Now that you have thus learnt to spell this natural word, turn to your "dictionaries" to find its signification. You will find its *chemical composition* and its relative weight or *specific gravity*, add these to your notes, and now you require its natural history or the part it plays in nature. But in the first place, note that this substance is homogeneous in its structure and essential characters, that is, every fragment, no matter how small, is identical in these respects with the largest mass; now we have agreed that it is a "mineral substance," because it is *natural* and *inorganic*; it is a "*mineral*," because it is also *homogeneous*. But this mineral sometimes occurs in large masses forming portions of the earth's crust; as we see in Greenland and in Alpine regions, where it forms the surface of the earth; or in the Andes or in Siberia, where we find extensive beds of ice actually intercalated between layers of earthy materials. Here then this mineral also occurs as a rock, or a mass of *mineral particles forming a portion of the earth's crust*.

But ice is not a mere passive rock, it is a great agent of geological change. "Glaciers" are rivers of ice flowing slowly down from higher levels and grinding away slowly

but surely the surfaces of the valleys down which they flow. They are some of the natural "mills of the Gods." "Icebergs" are the terminations of such glaciers that pass down and out into the sea, and are there broken off and floated away, bearing with them loads of earthy debris from the mountain sides, which by-and-by, when they melt, they will strew over the ocean-bed of some distant region. Again, if you carry on your enquiries, you will read that there was a time when the regions we at present inhabit were covered by a vast shelf of ice, even as Greenland is now, and almost anywhere in the Northern States you will see the evidences of this former condition of things in great accumulations of boulders or rounded rocks, and of clays and sand that were left where we now find them by the slowly melting ice. The rocks too around you will, if you look carefully, tell you of this same history, their surfaces being rounded, smoothed and scratched by the hard materials that were forced along beneath the vast mass of steadily moving ice. But it is not my place to tell you of this—I can only hint at it. Refer to Dana's Manual of Geology, p. 667 *et seq.*, "Freezing and Frozen Water." Refer to Lyell's Principles of Geology;—read about icebergs and glaciers in the Narratives of the Arctic Expeditions of Kane and of Hayes; read also Tyndall on Glaciers, etc. But you have not these books? Then by all means, if your principal wishes this subject taught in the school, let him hasten to procure them. No school library should be without such works of reference and general interest. Do you begin to see whither this subject is going to lead you and your pupils? In my next article, before selecting some examples for illustration from your case of minerals, I will suggest a lesson on the ubiquitous mineral, water, and you will find, I think, that in so doing, I shall have given you the clue "how to use a selected series of mineral substances as aids to education."

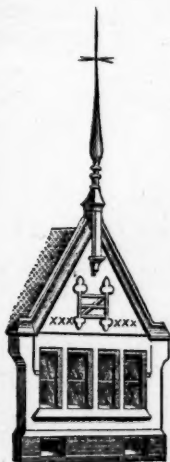
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A POEM in an agricultural paper, called "Song of the Farmer's Boy," appropriately commences with "Ho, brothers, ho!"



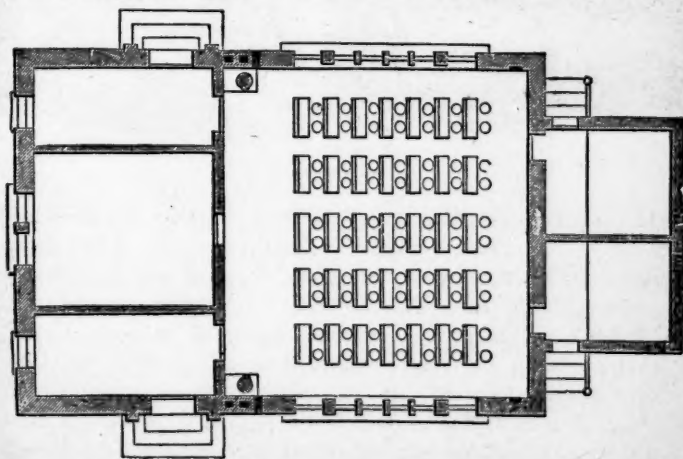
## UNION SCHOOLS.\*

SEVERAL of the following plans are well adapted to the wants of consolidated districts, and of Union Schools of two or more departments.



An effort has been made to present designs which will not only answer for immediate use, but will be permanent. In the construction of school-houses, it has too often been the case that present necessities alone have been provided for, and, in consequence, the structures have been of the most transient character, causing the whole school system to appear equally transient and unstable, and rendering necessary a heavy outlay for rebuilding.

The plan of this design gives a school-room thirty feet square, with seats for seventy pupils. By increasing its length respectively three or six feet, it will be made to accommodate eighty or ninety pupils, and by increasing its length six feet and its width four feet, there

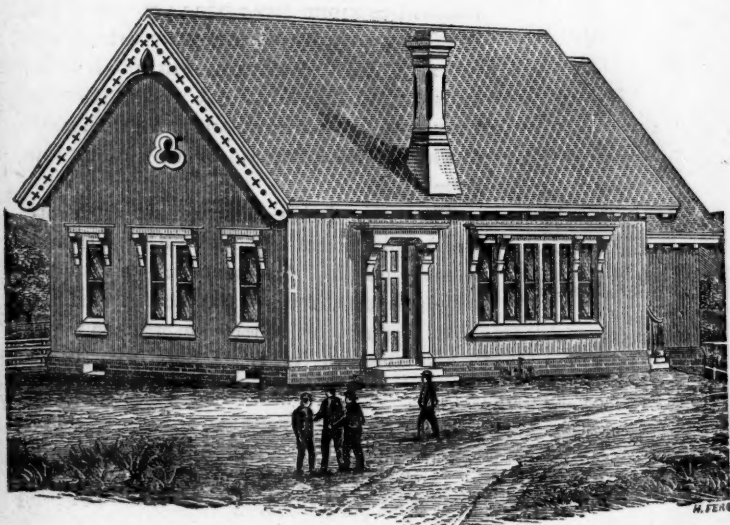


\* From *Johannot's new work on "School-Houses."*

will be room for one hundred and eight seats. The rear building may be used as a wood-room, or it may be made into one or two recitation-rooms.

The entrance to the recitation-room may be from the school-room or from the halls. The recitation-room may be heated by a hot-air pipe, extending from one of the stoves in the school-room.

Special attention is called to the arrangements of the windows and the ventilation of this building. The windows



ELEVATION 1.

are grouped together, and it is believed that this arrangement is the best possible. It furnishes a broad unbroken light, and in summer it will permit cooling draughts to circulate through the room whenever the air has any motion.

In winter the doors and windows must be kept closed, so that the air may be permitted to circulate in the channels provided for it. In this way the room will be kept warm in every part, a strong current of pure air is constantly entering the room, and the foul air is as constantly flowing out. We cannot too often or too strongly urge the

importance of providing for this perfect ventilation in the construction of school-houses.

This design has two fronts, with separate entrances for the sexes, but one might be omitted if thought advisable, and the space of the entry-way might be used as a clothes-room or extra recitation-room. It would be better, however, to retain both entrances.

ELEVATION NO. 1.—This elevation represents a plain wood building finished with battens. The roof is sufficiently steep for either slate or shingles. The plainness of the cornice has been relieved by ornamental scroll-work, which may be omitted.

The hoods over the doors and windows are simple, and they give an additional beauty to the structure. This building, with some simple changes, might be made of brick. If built of wood, it can be finished with the ordinary siding.



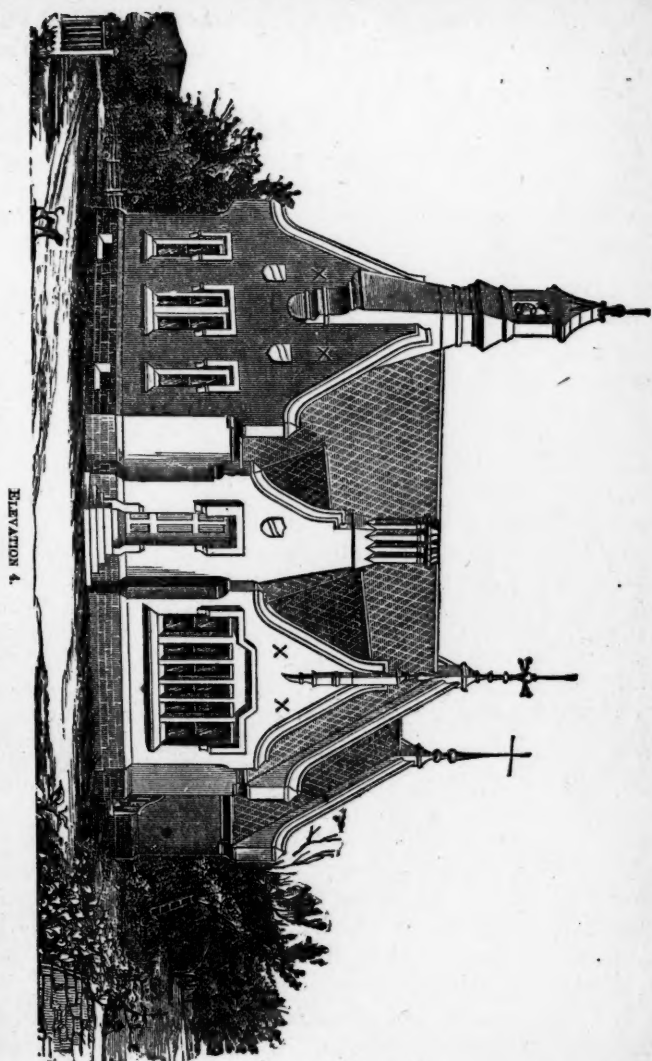
ELEVATION 2.

ELEVATION NO. 2.—In this elevation we have a more ornamental design. A cupola has been added for a bell-tower, and gables have been erected over the doors and windows, to relieve the monotony of the outline. The



ELEVATION 3.

gable over the door affords an opportunity for the construction of a very desirable open porch. The window-gable allows the window to be treated in an elegant manner, and the finish of both the sides and end gives to the building a very fine appearance. It will be noticed that, in the picture, the roof is slightly curved toward the eaves. This feature adds to the architectural beauty of the design, but it may be omitted, and still a good effect be produced. This design may be of wood, brick, or stone. If built of wood, the batten finish would be most in keeping with the general style of the structure.



ELEVATION NO. 3.—This elevation in general resembles No. 2, but is changed in many of its details. The roof is straight, and comes down much lower. The windows and



door-gables are elegant in design, and they are finished with simple stone copings. The cupola grows out of the structure, and is an integral part of it, which cannot be omitted without destroying the general symmetry of the design. The materials of this building should be brick or stone, and the roof should be slate. The pointed arches for the window-heads and doors give to the design a richness of appearance which fit it admirably for a village school, to occupy a prominent and sightly position.

ELEVATION NO. 4.—This design is more elaborate and quaint than any of the preceding. It has several of the features of the old Gothic forms. The roofs are high and pointed, and each gable ends in a pinnacle. The pinnacle of the front gable forms the bell-tower, and this tower commences with a stone projection just above the window-heads. The gables are all finished with stone copings instead of cornices. The doors and windows are projected outward from the sides of the building, and the door-gable terminates in the chimney, the flues of which are carried up in the door-projection. The rear of the door-gable is carried up straight, like similar projections in this style of architecture. The roof comes down below the gable copings, making the walls of the building comparatively low.

In making choice between these different elevations, care should be taken to select such as will be found to harmonize best with the surrounding scenery. Pointed gables and pinnacles will generally be found best adapted to a hilly country, while the broad roofs and projecting eaves will be more in harmony with the scenery of a level region. Again, there will be ample opportunity for the display of taste in deciding upon fitness in regard to situation, whether upon the hill-side or valley, whether in the village or strictly rural region, and whether in an open exposed place or nestled in some sheltered woody nook.

It is not desirable nor necessary to sacrifice convenience in order to obtain a good site. It should be remembered that accessibility is of great importance. These two desiderata can usually both be obtained.

THE GEOGRAPHY OF JAPAN.

I.

JAPAN seems to be a country whose geographical rights no map-maker is bound to respect. The wildest liberties have been taken by the geographies and encyclopedias, and a map of Japan, even in the stately royal atlas of Keith Johnson, not to mention his many copyists, is little more than a Dutch fraud. Almost every existing map of Japan, unless it be Stieler's latest, is a caricature, containing among others, the most startling orthographical wonders that ever made a Japanese laugh. When the writer was once teaching some bright Japanese youths "Goldsmith's Grammar of Geography," he begged them to skip the chapter on Japan, lest all their faith in Geography should be shipwrecked by reading that chapter describing the country they knew most about. Nearly all the spelling of names on maps extant and accessible to English speaking people, are but mere copies of Dutch caricatures of the native names, which the Dutchmen of Desima learned from ignorant interpreters. Now so long as Japan was an unknown country, a misty exaggeration, barbarian *ultima thule* cartographical accuracy was not considered necessary.

Geographers in writing the names of provinces, cities, mountains, and rivers, evidently thought that one letter of the English alphabet was as good as another, and a pinch of type picked at random from a printer's "pi," would express a Japanese name with sufficient correctness. Perhaps the readers of the EDUCATIONAL MONTHLY will accuse the writer of a weak attempt at wit. In all seriousness, we must reply that only profound ignorance, or the fact we have stated, can account for the outrageous spelling upon maps of Japan. There are scores of names upon Johnson's, Wyld's, Colton's, and Mitchell's that are, and never were, heard of in Japan, names which cannot be recognized with the help of spectacles, knit eyebrows or a knowledge of Dutch or Japanese, and which are the residuum of misunderstood Japanese, muddy Dutch, and careless English.

Now, however, Japan is our next door neighbor, our sailing ships flock thither, our steamers come and go bi-month-

ly, our navy is constantly at anchor on her coasts, our merchants, missionaries, and professional men are there by the hundred, and our teachers are abroad in the land, having as yet the leadership in Japanese educational affairs. When we date our letters at our places of residence in Japan, friends at home cannot find such places on the maps. For their sakes, we ask reform, and glad should we be, could our own country produce the best map of Japan, embodying the latest researches and discoveries.

Such rough notes as the writer here commits to print are the result of a study of native maps, much questioning of Japanese scholars, and personal observation made during three years residence, and over 2,500 miles consecutive travel on foot, horse, and man, in boat in the interior of Japan, about one-fourth of which was over land previously untrodden by foreign feet.

First then, let it be understood that the orthography employed in this paper is mainly that of the best Japanese scholars and English writers in Japan. In most cases, it is a simple transliteration of the Japanese letters, but as the Japanese alphabet is a redundant one, for the sake of simplicity and ease of pronunciation, all useless letters are eliminated. When a double letter is used it is to compensate for an elided letter or syllable. The phonetic changes in the Japanese language are like those of the Greek, i. e., perfectly natural. Thus the words *ten* and *po* united, make tempo, etc.

The vowels used are the Italian, sounded as *a*, in father, *e*, as in prey, *i*, as in pique, *o*, as in bone, *u*, as in true, etc. Long vowels have the circumflex accent, short vowels are unmarked; thus, in Ozaka the *ô* is long, in Odawara it is short. All such doubtful letters as *c*, *q*, *x*, and the Greek digraph *ph* for *f*, are never used. *J* has its soft, and *g* its hard sound. The sounds represented by the letters *l*, *v*, and the digraph *th*, do not exist in Japanese.

In regard to the general dimensions, main internal features, contour and coast line, most foreign maps are correct, chiefly because of the astronomical observations often taken, and because in making the Dutch and English maps, that remarkable specimen of Japanese cartography the

*Nihon Fissoku Chidzu* (coast-line map of Japan) has been taken as a basis. We should have remarked, that the reason for the false orthography of our maps is because nearly all are copied from the Dutch, who achieved such curiosities as Jeddo, Jesso, Jamato, etc., etc.

Foreigners have taken the unwarrantable liberty of calling the main island of the Japanese group "Niphon." Now the name of the entire Japanese Empire from Saghalin to the Liu Kiu islands, is Nippon, or Dai Nippon. The spelling of this word may be either Nippon or Nihon. It cannot be properly spelled Niphon, for very much the same reason that a Latin scholar cannot spell professor "prof-essor." Then as to the main island, no Japanese ever called it Nippon and would not do so, any more than we would call New England the United States. The Japanese have no special name for their largest island. They use other names for certain large subdivisions, just as we say, "West of the Rocky Mountains," "North of Mason and Dixon's line," etc. We should think it an impertinence for a foreigner to set misleading names to our natural divisions. Have the Japanese no rights?

Again, geographers have set down Miako, as the proper name of Kioto. Miako means "Imperial capital," or simply "city." The word Miako is used in poetry, patriotic speeches, etc., but never applied as a proper name. What would we think of seeing a map of the United States marked "Columbia," with "Capital" instead of Washington, and "Quaker City" instead of Philadelphia? Again, no correct writer ever spells Yedo in another way than the way the two Japanese letters warrant. The name of this large city, whose name was changed six years ago, is Tokei or Tokio, the former writing preferred, and its population, according to a recent census, is about, or less than, 800,000. In its best days, it could not have contained over 1,000,000. Kioto has 375,000, Ozaka, (accent on the O) has 414,000. Hakodate in Yezo, Nagasaki in the extreme south, Yokohama near Tokei, Niigata on the west coast, Kobe near Ozaka, are now the ports open to foreign commerce. Foreigners are allowed to travel only within a radius of twenty-five miles from each of these ports.

The exact population of Japan is not easy to determine. Natives boast of a total of between 34 and 50,000,000. A census, in our sense of the word, has never been made in Japan. Those who have paid most attention to the subject believe the limits of the population to be between 15 and 20,000,000. Some even declare it to be but 12,000,000.

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### SUBLIME.

THERE is an interesting history connected with this word. It is derived from the Latin adjective *sublimis*, uplifted, high, lofty, exalted, elevated. As *sub* means *under* and *limus*, *mud*, it has been a matter of conjecture how *sublimis* could have been used to mean *lofty* or *exalted*. The usual interpretation has been that *sublimis* means *supra limum* above the mud and not *sub limum* under the mud.

Dugald Stewart (see Hamilton's edition of Stewart's works in eleven volumes, vol. v., p. 279) says:

"As for the etymology of sublime, (*sublimis*,) I leave it willingly to the conjecture of lexicographers. The common one which we meet with in our Latin dictionaries (q. *supra limum*) is altogether unworthy of notice."

The objections that Stewart had in his mind to this etymology were that it assigns a *base and abject origin* to a word identified, both in ancient and modern languages, with all our loftiest and most *unearthly* conceptions, and that it gives an *anomalous and inexplicable extension* to the preposition *sub*, making its meaning directly contrary to that in which it is generally understood.

Stewart's rejection of the above etymology called out the learned Dr. Parr (1747-1825), a man whom Macaulay calls in his description of the trial of Warren Hastings, "the greatest scholar of his age." In the second edition of his *Essays* (1816) Stewart gives, in an appendix, copious extracts from Parr's discussion. These extracts cover eight closely-printed pages. Parr starts out with this assertion: "When a language furnishes all the constituent parts of a



compound word, and when no other part of that language offers, even to our conjecture, any other terms, there surely is abundant reason for our acquiescence in that etymology, which contains nothing irrational and absurd."

He proceeds to show by quotations from Latin and Greek that the insignificant and offensive notions that adhere to the parts of a compound word separately considered may be unseen and unfelt in the compound, especially when used metaphorically.

"In the formation of *sublimis*, I suspect that not 'dirtiness,' the property of *limus*, but 'tenacity,' the effect of it, is included in the word, and that the addition of *sub* or *super* suggested the notion of exemption from that effect, and thus the notion of 'soaring' indefinitely would be formed in the mind." \* \* \* "In the formation of *sublimis* the process of the mind seems to me to be this. *Limus* has the property of 'obstructing.' That to which the word *sublimis* was applied, is 'raised above the obstructing cause.' It can soar—it does soar;—and thus the notion of 'soaring indefinitely' is familiarized to the mind. The origin of the word, and its literal signification, did not present themselves to the mind of the speaker or hearer. By custom, the word had acquired the sense of 'soaring' in the way probably which I have stated; and neither *limus*, nor the mere circumstance of being 'raised super limum,' was ever thought of, when the power of the word to express elevation had been established. The idea of the elevation itself is so agreeable and so interesting, as not to leave leisure or inclination for analyzing the word by which 'elevation' was expressed."

He next proceeds to show by numerous Latin quotations that although *sub* never means *up* when standing alone, yet that it frequently means *up* in composition.

"Long was I puzzled with the contrary powers of *sub* in compounded words. I knew that in Latin the sibilant letter is often substituted for the aspirate,—for as  $\acute{\epsilon}\xi$  gives *sex* and  $\acute{\epsilon}\rho\pi\omega$ , *serpo*, so  $\upsilon\pi\acute{o}$  would become *sub*. Reflecting upon this subject, I perceived that *sub*, when it signifies 'elevation,' came from  $\upsilon\pi\acute{\epsilon}\rho$ , and that  $\upsilon\pi\acute{\epsilon}\rho$ , like  $\upsilon\pi\acute{o}$ , lost the closing letters, and that  $\phi$  was changed into  $\nu$ . I never saw this

stated in any book, directly or indirectly. But no conjecture was ever more clear or more satisfactory to my mind; and *it solves all difficulties*. The letters and the sound of *sub* are the same when their signification is different, because they flow from different Greek words. I think Mr. Stewart will be convinced in one moment."

Mr. Stewart was convinced and thus expressed himself:

"I have allowed the foregoing sentence [the first quotation given above] to remain as it stood in the *former* edition of this work, although I have since been satisfied, by some observations kindly sent me by my very learned, philosophical, and reverend friend, Dr. Parr, that the opinion which I have here pronounced with so much confidence, is unsound. The mortification I feel in making this acknowledgment is to me much more than compensated by the opportunity afforded me of gratifying my readers with a short extract from his animadversions; and, at the same time, of indulging my own vanity, by preserving a memorial of the literary intercourse which I have sometimes been permitted to enjoy with the most profound and accomplished scholar of his age."

Although Stewart made a handsome surrender, yet it is very questionable whether he ought to have been convinced. Sir William Hamilton says: "It ought, however, to be mentioned, that Dr. Parr's derivation of the word *sublimis*, and, in particular, his speculations concerning the meaning and genesis of the preposition *sub*, are in sundry respects by no means satisfactory; and they are attacked, among other philologists, by the late Dr. Hunter, Professor of Humanity in St. Andrews, in his edition of *Virgil*, 1825, p. 36, *seq.* The objections of Dr. Hunter and others will be found, however, conveniently extracted and collected by Mr. Barker, in his *Parriana*, vol. ii., p. 497, *seq.*"

Not having these works I am unable to give the objections urged to the views of Parr. Latham, in the fourth volume of his edition of Johnson's Dictionary, says that the scholarship of England has generally agreed with the views of Dr. Parr.

Vossius (see Richardson's Dictionary, p. 1845) prefers to derive the word from "*sublimen*, quia quod *sublime* est, id

instar *subliminis* est elevatum." *Sublimen*, a word not found in Andrews's Latin Dictionary, is used by Vossius for *limen superum*, the upper lintel of a door. Vossius's derivation is then from "*sublimen*, because that which is *sublime* is elevated like the upper lintel of a door."

The following conjectures, which I think have never been made before, are as plausible as that of Vossius.

*Sublime* from *sub* for *super* and *lima*, a file, that is, so grand that it is above the file, or, figuratively, above the need of *polishing* or *revision*.

*Sublime* from *sub* for *super* and *linus*, a girdle or apron, that is above the girdle or in the region of man's higher nature.

*Sublime* from *sub* for *super* and *limes*, a path, that is, above the beaten path.

It is desirable that some of the renowned Sanskrit scholars should investigate the word to see whether the doubts as to its true origin may not be removed. If there are no phonetic objections to the conjectural etymology given in Andrews's Latin Lexicon it should be received, because the association of *sublimis* with *sublevare*, to exalt, is simple and reasonable.

It may be well to close by a reference to Menage's Etymological Dictionary of the French Language, Paris, 1694.

"SUBLIME. De *Sublimatus*: en sousentendant *mercurius*."

Sublimé. From *sublimatus*: Mercury being understood. *Sublimatus* is the perfect participle of the verb *sublimare*, to raise aloft. I suppose that *sublimis* would generally have been referred to *sublimare* if the latter had not been considered as derived from the former.

W. D. HENKLE.

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THE "Life of Washington," published at Yedo in the Japanese language, is in forty-four volumes, illustrated. Washington is represented in the costume of the present day, wearing a moustache, sporting a cane, and accompanied by a skye-terrier.

ORIGINAL RESEARCH AS A MEANS  
OF EDUCATION.

IT is the greatest possible mistake to suppose, as unfortunately many yet do, that a scientific education unfits a man for the pursuits of ordinary professional, or commercial life. I believe that no one can be unfitted for business life or occupations by the study of phenomena, all of which are based upon law, the knowledge of which can only be obtained by the exercise of exact habits of thought, and patient and laborious effort. I dare say many who have had a scientific education make bad men of business, but so do many who have not had such an education; it is not the scientific education which has spoilt them.

Even more directly does the value of scientific education bear upon professional and manufacturing life. The medical man's success depends mainly upon the exercise of faculties which are pre-eminently called forth, and strengthened in original scientific investigations. The manufacturer who aspires to something more than following the rule-of-thumb work of his predecessors, requires exactly these habits of mind which are developed by original research. If the brewer, the calico-printer, the dyer, the alkali-maker, the metallurgist wish to make any advance of their own in their respective trades, they cannot do so without the exercise of powers which can only be gained by the prosecution of original inquiry. Doubtless many—nay, even most—of the great discoveries and improvements in the arts and manufactures may have been made by men who have been self-taught. But these men have acquired for themselves, by slow and difficult steps, the same habits of exact observation, patient and laborious devotion, and manipulative or constructive skill which the modern student of science may, at any rate to a very considerable extent, gain in his college course. So valuable is this kind of education found to be, that in Germany, where it is most practised, the chemical manufacturers now refuse to take young men into their works unless they have had not merely a scientific education, but have also prosecuted original investigation.—*Nature.*

THE ORIGIN OF OUTLINE MAPS.

OUTLINE maps have proved a valuable aid to the teacher in the work of instruction. To give pupils, at the start, a definite notion of the form of a state, or of a country, and a clear impression of the relative positions of its rivers, mountains, and important cities, so that he may locate them independently, is an important step. The history of the origin of this class of maps seems to have been left obscure, and it may not be uninteresting to give the occasion of their introduction in this country.

The first outline maps of the United States, and the individual States, were published in the summer of 1841, by Mather, Case, Tiffany & Burnham, of Hartford, Conn. Several months prior to their issue Mr. Mather, a canvassing agent for the sale of a new map of the United States, called on Mr. S. Chase, Principal of the Preparatory School, Middletown, Ct., to sell him his map. On making his business known, the principal replied: "New States are coming into the Union so rapidly that a large and expensive map soon becomes obsolete, but if you wish to aid the cause of education, and yourself at the same time, a way can be shown you." Curiosity was excited, and the canvasser, though failing to sell his map, remained most of the morning, the principal giving him in detail his idea of a set of outline maps for schools in this country, designating one of North America, one of the United States, and one of each State then composing the Union. These maps were to give the prominent features—the capitals, the largest cities, the important rivers, and the principal lakes and mountain ranges, but not to enter into details. Mr. Mather was slow to appreciate "maps with no names on them," as he termed it, and insisted that no one would purchase them, until he was given a practical illustration of their use. That became the "*argumentum ad hominem*," and he was satisfied. "Now," said the principal, "if you will get up this set of maps, you can add to your series as long as there is territory to make a State of, and you must furnish me the first set." The determination was made, and the parties separated.

## *Moral Training.*

After some months, Mr. Mather called on the principal, in 1841, and delivered to him the first set issued. After being used at the above-named place for some time, they were taken in 1848 to Newark, N. J., and used at the Newark Wes. Institute till 1854, when they were removed to Albany, N. Y., and used in a private school, where the writer has seen the pupils "singing their geography" from them as though they were note-books. They were subsequently taken to Orange County, N. Y., and the last known of them, three or four years ago, they were doing service in a country District School. Thus much for Outline Maps, and the history of the first set issued.

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## *MORAL TRAINING.*

"Just as the twig is bent the tree's inclined."

THE great amount of dishonesty which is continually coming to light in all quarters, shows a low standard of morals, and indicates a serious defect in the moral training of children. The public schools ought to furnish such a training as will give us men of integrity as well as ability. Since intelligence is the distinguishing feature between a man and a brute, the great work of the schools has been directed to the development and culture of the intellect. This is a most important work, but as "Great ill is the achievement of great powers," the highest object of education is not secured without so cultivating the moral faculties, that they shall direct and control the mental faculties. Though they are designed to hold such a relation, their thorough cultivation has not been duly attended to.

In the work of cultivating the mind and storing it, there is a regular process carried on daily, through weeks, months and years. Whoever will recall his school experience, will remember how he was drilled in the different branches of study. The children all pass through this process, and by that means acquire a substantial education. Our population is characterized for general intelligence. Now, when



the moral training is contrasted with this the deficiency is striking. It is painfully true that what is done in this department is meagre, vague and feeble, and almost wholly of a negative character. Teachers are required to have "a good moral character," which is simply understood to imply freedom from the common vices. Profanity and vulgarity are prohibited. Cases of petty theft are reprimanded, quarrelling is in some way punished, and improprieties of conduct generally call forth some homily. Lying is especially reproved; but the whole class of moral offences are treated more as misdemeanors than immoralities. There is in this manner no thorough work from the foundation, in laying and fixing the broad distinction between right and wrong.

A child understands that ignorance is a deplorable state, and hence the great necessity that he should learn. He ought to be made to feel that immorality is a far deeper degradation, and hence the greater need that he pursue a course of upright conduct, both from principle and impulse. But as the tendency of immorality is to contaminate all who come in contact with it, and as the impulses of the passions are continually to evil habits and practices, so the efforts to restrain these tendencies, and develop the virtues, is a work of time and pains. But here we can see a striking deficiency in our educational system. The instruction in morals is almost wholly left out of the programme of school work. This method of instruction has so long prevailed, that the result is, the moral perceptions and impulses are weak, and we have a class of men poorly prepared for the moral position into which they are brought by the ordinary course of events, and the standard of morals is low. Practices involving gross immorality have become common, and call forth but a weak disapproval. They are not confined to that class of society pronounced vicious, but are tolerated among those who claim respectability. Hence the tendency to lax morals becomes stronger, and spreads wider. Children are taught from infancy, by their parents, that certain acts are vicious and others are criminal, and this is impressed on their minds by constant reiteration. The strong conviction of the parent is fixed in the mind of the

child, by long effort, and positive instructions. A young culprit who slyly appropriates even some small article from a store, is, in a decided manner, pronounced a thief, and it fixes a stain upon his character of which he will show a consciousness. The older and bolder offender who steals into a dwelling, taking whatever valuables fall within his reach, is pronounced a confirmed and degraded thief. Such flagrant cases impress the minds of the young with the criminality of such overt acts. They take their impressions from parents and superiors, and they become indelibly fixed. But when offences take a different form and are committed indirectly, through deception, the judgment against them is indistinct. The child, perhaps, sees that deception is not an uncommon thing, and that even his own parents sometimes resort to it, and thus his impressions of its guilt are slight. Under such influences our children grow up, and gradually fall into the practice of deception, and easily pass through its gradations to the most gross and confirmed dishonesty. General looseness in morals has thus become confirmed in the community, and is increasing. Its results are seen in business practices, and the fruits, in the alarming frequency of dishonesty in mercantile transactions, and in the embezzlement of funds held in trust.

In trade scarcely an article passes without some deterioration. Adulterations are almost universal, and yet the stamp of "genuine" and "pure" is affixed when it is known to be untrue. In manufactures, there is ordinarily a failure to observe the required faithfulness and care in construction, an inferior quality of material is used, and still, as far as possible, the price of a perfect article is taken, when it is far below a true standard. Here is stealing insidiously practised, the young see it and are virtually trained into it. They are not taught effectually that the merchant who, through a false balance, sells fifteen and half ounces of tea (or other commodity) for a pound, steals from his customer the price of the lacking half ounce, as clearly as if he took it from his purse by a direct act. Alas for the number of false weights and measures (which would be detected by a full disclosure of facts) and the more false weighers and measurers, who are plying their vocation, and yet pass for honest men. This

fault—this vice of dishonesty—lies in a defective education. It has not from childhood, by precept and practice, been impressed on the character of the youth

“To do justly.”

One important—preëminently important—branch of knowledge has been grossly neglected in teaching. Such practices in trade have not been shown to children in their real character. The resulting ignorance is seen in their general prevalence, an ignorance not of the head, but of the heart. If a comparison is made between the labor performed by teacher and scholar in securing a fair amount of knowledge in Arithmetic, Grammar, or any of the leading branches of study, and the labor and study devoted to fixing in the mind the principles of rigid honesty and strict integrity,—in pointing out closely the principles of morality, and applying them to the common purposes of life, we should find an astonishing disparity. It would show that little is attempted, and would leave no surprise that less is accomplished.

Such a careless and negligent training in morals, wholly fails to build a character on a substantial basis. Is it replied that moral training is left to the family, the Sunday-school, and the instructions of the ministry? How very small, comparatively, is the number who stately have efficient instruction in these ways! These institutions are inestimable, but at best are irregular in effect. If they are the main dependence for public morality, alas for the community! Far less would be the danger of trusting in part to the same source for literary instruction. If our schools concentrated their great power on the formation of a virtuous community, securing as they might integrity and uprightness, even at the expense of some arithmetic and grammar, what a benefit would follow to the public at large! G. A. W.

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FIVE out of nine of the leading business houses in Manchester, Iowa, are managed by ladies. It is suggested that the name of the town be changed to Womanchester.

*THE SIGNAL SERVICE.*

WE see by the Signal Report that the percentage of verifications is considerably larger this year than last. For New England it was, 81.50; for the Middle States, 81.17; for the South Atlantic, 79.92; for the Lower Lakes, 78.90; for the Eastern Gulf, 77.16; for the Ohio Valley, 76.42; for the Western Gulf, 74.40; for the Upper Lakes, 75.25; and for the Northwest, 74. The general average given in last year's report was 76.8. Reports are regularly received from ninety-two stations, seventy-eight of which are in the United States; eleven are in Canada, and three in the West Indies. The regular telegraphic reports from Havana, Cuba, began on August 6th; from Kingston, Jamaica, on September 18th, and from Santiago de Cuba, on September 29th. Three other points in the islands of Porto Rico, Guadalupe, and Barbadoes, will be equipped soon. Arrangements have been made with Russia and Turkey to commence, on January 1st, the exchange of one daily report, taken simultaneously at the different stations throughout the great territorial extent of the Russian and Turkish empires, and the United States. It is expected that other nations will soon co-operate with us in this service.

The practical benefit derived from these reports can hardly be overestimated. Great pains have been taken to benefit the farmers, and arrangements have been made for daily posting the reports at 4,491 post-offices, throughout the country. To protect the business interests from injury along the rivers, a large number of reports have been made daily, giving the state of the weather, and the results are gratifying.

During the year eighty-eight warnings of storms have been made, seventy of which proved to be serious. The mistakes, if any, have been on the side of caution. While on some occasions the signals ordered may have proved unnecessary, and are so reported unverified, on the other hand no extensive storms have occurred in the regions included in the system of cautionary signals without warning of its

approach having been displayed in at least part of its course.

It is estimated that at least one-third of the people of this country, through these various sources, have the benefit of the weather observations.

The report mentions in detail the arrangements made to carry out the law of Congress requiring the connection of the service with the life-saving stations on the coast. It is hoped that Congress will, by future appropriations, allow the extension of this special work on the lake and sea coasts, where the life-saving and lighthouse system are deemed necessary, affording thus a system of coast service unparalleled in the world.

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PROF. PHELPS AND THE NORMAL  
SCHOOL DIRECTORS.

THE annual meeting of the Minnesota State Board of Normal School Directors was held at St. Paul, on Nov. 12th. The greater part of the session, judging from the report in a local paper, was devoted to discussing and condemning the "angularities," and "unfortunate temperament, and naturally sour disposition," of Prof. William F. Phelps, Principal of the Winona Normal School. According to Superintendent Wilson, "his spleen, gangrenous disposition, and irritable temper, increase with his age," and he is altogether so undesirable a person that the Board is called upon, in two sets of savage resolutions, to discharge him. The charges against him may be summed up in this, that he does what he pleases in defiance of the Board. For example, the Board passed a resolution prohibiting instruction in German in a model school, thereupon Prof. Phelps organized a German class in the Winona model school. The Board ordered a meeting of the faculty at Winona to devise a plan for reducing the number of model schools in that city, but Prof. Phelps would not call the meeting. The Professor has further made the Board pay for printing and circulating his abuse of them, sending in a stationery bill of \$1,792.23

for 1871. This does not include printing, \$165.30, or post age, \$87.43. So it would appear that Prof. Phelps is an expensive luxury, if indeed he is a luxury at all.

To all the attacks the Professor seems to have responded not at all. Perhaps he had no defense, and perhaps he may be reserving his powers, to pour out such a torrent of abuse upon his enemies, as shall quiet them forever. Inasmuch as some of his published letters contain such epithets as "blockhead," "sorehead," "leatherhead," "dotard" and so on, we do not doubt his ability to hold his own in this exchange of billingsgate. Altogether this "distinguished educator" seems likely, in Minnesota, to add to the fame which he acquired years ago, in New Jersey and New York.

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#### *THE GINNS AND THE COWPERTHWAIT.*

A VERY lively quarrel has been in progress for some time between the Messrs. Ginn Brothers and Messrs. Cowperthwait & Co., regarding the merits of their respective publications,—“Our World No. 2,” and “Warren’s Common School Geography.” It originated, apparently, in a circular of the Cowperthwaits’, affirming that “Our World” was poorly printed, badly bound, inaccurate in maps, and was altogether such a wretched work, that they would be sorry to see it introduced into the New England schools. The Ginn Brothers replied that their books were models of mechanical execution, and, to prove it, produced letters from the people who made the books! None certainly could be better posted than they. As regards the maps, the Messrs. Ginn Brothers not only say that theirs are correct, but that Warren’s are wrong. They charge, for example, that Warren has moved Philadelphia 270 miles too far South, while Dresden, Marseilles, and Berne, have been placed from 20 to 25 miles too far North. The entire matter is to be settled by law, and, should the Ginn Brothers prove their statements, the Cowperthwaits will be liable to heavy damages from the Philadelphians, Dresdeners, and



others, for moving their cities to such inaccessible places. The "false, defamatory, and malicious libel" of the Cowperthwaits has been so effective, that the Ginn Brothers claim to have lost \$25,000 in consequence, and have sued to recover that amount. This loss has been sustained by not getting their books adopted in several New England cities. It would seem that the "libel" was unusually artful, or that there was some truth in it.

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*CREAM OF THE EDUCATIONAL MONTHLIES.*

THERE seems to be some opposition to the proposed city college in the old post-office building at Chicago, because it will benefit the rich more than the poor, and because the latter should not have it, it being undesirable to educate people above their sphere. On this the *Chicago Teacher* remarks, that it is untrue that the rich will be unduly benefitted, judging from the proportion of the two classes found in the High Schools. Even were it the case there would be no injustice in it, inasmuch as the rich support the schools so largely. As to educating people above their sphere it may be remarked, that the proper education for a person is all that can possibly be gained. There is, too, another advantage in these higher schools, they bring the different classes into contact, and give them a better understanding of each other. We should hardly have thought it "the grandest discovery of social science" though, had not the *Teacher* told us it was. All through the short paragraphs, otherwise good, there is a great deal of this "spread eagle" and exaggeration, as, for example, in an article on teaching, where we are assured that "the principal of a large city school does more good or evil with a word, than the six or eight clergymen in his district do in their twenty-five years of pulpit-pounding." "Will it be a Prison?" "The Chicago Parent," "A Look Beyond," a good article on the end to be attained by punishment, "Kindergartens," and "First Grade Drawing" are among the other subjects commented upon.

An interesting sketch of how we stood in educational matters at the Vienna Exposition may be found in the *Massachusetts Teacher*. Our school-house "had a general resemblance to some of the district school-houses of a somewhat modern date, which we might find in some of the most educationally backward country towns of Massachusetts." It was poorly lighted, badly ventilated, and was papered with somewhat showy wall-paper, but, to make up for all deficiencies, the teacher's platform was covered with Brussels carpet. In some things we stood well however. Our school furniture was far superior to any other exhibited, and, although the German atlases surpassed ours in beauty and cheapness, there was no whole set of wall-maps so extensive or so good as Guyot's largest series. Washington sent a beautiful fac-simile model of the Franklin Grammar School, and New York had a creditable collective exhibition, as did also some of the western cities. The Grand Diploma of Honor was awarded to our National Bureau of Education, and both Massachusetts and the "Hub" were granted Grand Diplomas. The editor's department contains an answer to the article, "Natural History from Pictures," noticed last month. "A Criticism" argues that Boston girls are unfairly treated, because they cannot prepare themselves for college at the public schools as their brothers can.

*The National Normal* contains a sensible article on "Ventilation in Country School-houses." It speaks of the great importance of fresh air, but thinks it too dearly obtained by getting it in cold currents, on pupils' heads. If the stove is near a door or window, an opening can be made so that the air shall strike the stove and be warmed before circulating through the room. If this cannot be arranged, a recess of five minutes can be given at the end of each hour, and the doors and windows can be opened during that time. Of course the teacher and pupils must go out to play meanwhile, to keep from catching cold. A better way would be to have the school-house properly arranged for ventilation when built, but that is too much to expect. "Model Schools," "Public School Culture," and a very full "Intelligence Department" are among the other features of this

number. In the latter we find the wonderful statement, that thirteen hundred and thirteen of the Vermont teachers "board around!"

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## CORRESPONDENCE.

[The following interesting letter was addressed to Prof. F. A. Allen, after his recent "Institute," in the City of Portland, Maine, by Dr. Thomas Hill, former President of Harvard University.—EDITOR.]

DEAR SIR,—I am glad to see by the newspaper reports of your Institutes that you are endeavoring to show our school teachers the injurious effects of the popular devotion to Arithmetic. There is such a fascination in the beautiful simplicity of the science of numbers, and its practical utility is so obvious to every mind, that teachers exaggerate its comparative value, spend an undue amount of time upon it, and set pupils at it too early. They thus crowd out other branches, (the science of form, the elements of drawing, and the training of the observing powers in natural science) which are equally important and better adapted to the tastes and ability of young children. They also actually do injury to the children's arithmetical powers, by disgusting and wearying them, and getting them into habits of languid, uninterested study.

When Father Cyrus Peirce was teaching the Normal School at Lexington, Mass., I gave some lectures to his school, laying out a plan of study by which the children, at the age of fifteen, should have been "worked" much less than by the usual course, and should have also gained a much better knowledge of arithmetic; and, in addition, should have clear and valuable knowledge and mental discipline gained from geometry, mineralogy, botany and zoology, and drawing on the blackboard, singing, etc. No school that I know of has yet adopted my plan in its completeness,—but drawing and singing have since been introduced into a majority of primary schools.

I was for fourteen years on the School Board of Waltham,

Mass. We reduced the number of school hours, cutting off part of the afternoon sessions, lengthening the recesses, and making the terms shorter, and vacations longer. We reduced the time given to arithmetic down to less than one-half, introducing in its place, for young scholars, beans, little bricks, blackboard drawing, and elementary geometry, —for older ones botany, zoology, short-hand, and reading of classics. We also increased the amount of reading in all classes, by banishing mental arithmetic from the primary schools, and reducing spelling to mere dictation exercises from the reading lessons, introducing also a phonetic type for beginners, by which they learned much more readily, both to read and to spell.

What was the result of this placing of arithmetic, and spelling in a subordinate position, and giving more valuable studies a prominent place? Our schools became famous for correct spelling, for good reading, and correct pronunciation, and famous for arithmetical skill. Whole classes at the age of fifteen were able—I mean each scholar in the class was able—to begin at the end of Greenleaf's or any other arithmetic, and solve, going backward through the book, any examples selected by the committee or visitors, mentally, or aloud orally, without pen or pencil. Whole classes, at the age of sixteen to eighteen, were perfectly at home in Peirce's Algebra, including Arbogast's Polynomial Theorem, and the evolution of Numerical Equations by the aid of derivative functions. I venture to say that neither the public schools of Boston, nor of any other city in America were, during the six years, 1855-1861, comparable to the Public Schools at Waltham. \* \* \*

I wish you abundant success in your efforts to do for the schools of the country what our committee in Waltham thus did for the schools of their town, by freeing them from the tyranny of a servant, turned master. Arithmetic is the mere servant to apply to practical uses, the truths of the other sciences; the other sciences minister to the higher needs of the mind, and increase the powers and expand the joys of the soul.

Yours ever truly,

THOMAS HILL.

## EDUCATIONAL INTELLIGENCE.

ALABAMA.—MONTGOMERY.—At a meeting of the Board of Education, held Nov. 18th, Hon. Joseph H. Speed made an address in which he referred to the working of the school law forbidding the employment of teachers unless there is money to pay them. The State has used more than \$1,250,000 of the school fund, and in consequence of the bankruptcy thus produced, all the schools have been closed during the year. It was proposed to issue interest-bearing warrants to the teachers, that they might be able to procure the necessities of life.

ILLINOIS.—The report of the Peoria County Normal School shows an enrollment of one hundred and fourteen. The number of graduates in the full course is six. Fifty per cent. of those receiving certificates to teach in the county in 1872 were graduates of the school. The salutary influence of the school is seen in the greater permanence of teachers.—At the recent election thirty-four ladies in thirty counties were candidates for the office of County Superintendent, and eleven were elected; five of these were married.

KENTUCKY.—The unexpected diminution of \$241,858 in the school fund this year, due to the diminished *per capita* tax, has not only caused a reduction in the wages of teachers, but has also resulted in the closing of a number of schools. The available fund this year is only \$1.60 for each child of legal school age.

VIRGINIA.—The Superintendent of Public Instruction says that the annual reports of the state of education are more favorable than was expected. The aggregate enrollment has been somewhat less than for the preceding year, but in a large majority of counties there was a decided advance in liberality on the part of Supervisors, and in the co-operative spirit of the community. The income and expenditures of the year did not materially differ from those of the year preceding. The schools generally are in full operation with good attendance.

## CURRENT PUBLICATIONS.

THE system of graded instruction, which has become so general in this country, requires for its successful application the constant use on the part of the teacher of a chart, or guide to which he may refer, in order that his present work may harmonize with that which preceded it, and that which is to follow it. Such a guide is now offered to teachers, superintendents, and school officers, with the title, "How to Teach." (1)

To prepare a practical guide for a graded system of school instruction requires long experience both in the business of teaching and in the supervision of the work of teachers, in order that the field of observation shall be sufficiently comprehensive to furnish that familiarity with the various conditions of schools, the average abilities of teacher, and the needs of pupils, to give the system an adaptability to a great variety of circumstances. The publishers of this work confidently believe that its authors possess the requisite attainments and ability as teachers, success as superintendents, and long and varied experience in the duties of these positions to give assurance that the work prepared by them will be found to be completely adapted to the wants of teachers and others in arranging and conducting successfully a graded course of instruction in any school.

The course now presented embraces essentially the system which has been in use in the public schools of New York City for several years; and differs from that only in the number of grades into which the course is divided. This difference, however, is more nominal than real, since the number of grades into which a course of study may be divided is entirely arbitrary, except so far as special circumstances may dictate. The *order* of the studies is the main point in every course of instruction. But this work now presented comprises far more valuable matter than is contained in the graded course itself; elaborate and practical

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(1) "How to Teach—A Manual of Methods for a Graded Course of Instruction; embracing the subjects usually taught in Primary, Intermediate, Grammar and High Schools." By HENRY KIDDLE, THOS. F. HARRISON and N. A. CALKINS, Superintendents of Schools of the City of New York.



suggestions are given to teachers relative to methods of instruction for the several subjects of the course, in each of the grades. Many of the single suggestions will be found of more value to the teacher than the cost of the entire work. This book is especially adapted to assist teachers in the duties of the school-room, first it shows them *what to teach* in each class, then *how to teach it*.

Some idea of the comprehensive character of the work may be obtained from the following list of studies embraced in the directions for teaching presented in it: Reading, Phonetics, Spelling, Definitions, Object Lessons, Oral Instruction in the Elements of Science, Arithmetic from notation through percentage, Tables, Geography, Physical Geography, Grammar, Composition, Writing, Drawing, Book-keeping, History of the United States, Ancient and Modern History, Elements of Botany, Zoology, Mineralogy, Physiology and Hygiene, Natural Philosophy, Astronomy, Chemistry, Algebra, Geometry, Government and Discipline, Manners and Morals, School Library, etc., etc.

Without doubt this "Manual of Methods" will prove the most practically useful and valuable book for teachers and school officers ever published in this or any other country.

It contains about 300 12mo. pages. It is mailed for \$1.25.

THE age is emphatically one of cyclopedic literature. The "Annual Cyclopædia" of the *Messrs. Appleton* has reached its twelfth volume in the issue for the year 1872. It is one of those year books which no teacher, no scholar, and no business man can afford to be without. While it might in some respects be better than it is, reviewing the events of the year from a higher plane and with a broader and more comprehensive sweep, and thus making itself felt as a power in the nation and the world, it is as at present constructed so good and valuable that we are bound to be thankful for the patient and plodding perseverance which year after year gathers from so many and so wide sources, its numerous and important details and statistics. Its annual sketches of the progress of states and nations, its chronicle of geographical discovery, its record of the literature of the year,

the progress of the year in science and the arts, in finance, commerce, and political matters; the congressional and diplomatic measures of the time, and that long roll of the dead of the year, with more copious notes of who they were and what they did than are elsewhere to be found, all these commend it to general acceptance. To err is human, and errors have doubtless crept into these successive volumes; but considering the vastness and variety of the labor bestowed upon the volumes, the great marvel is that there even should have been so few. The work receives as it deserves a wide circulation. From another source, we receive the fifth volume of another cyclopedic work, "The Cyclopædia of Biblical, Theological and Ecclesiastical Literature" of *Messrs. McClintock and Strong*. This is an undertaking of vast labor, combining as it does all the best features of Smith's Dictionary of Biblical Literature, Herzog's Theological Encyclopædia, the most complete Histories of all Religious denominations, and a great number of biographies of men eminent in the religious world, together with numerous topics treated for the first time in its pages. We have carefully examined each volume as it appeared, and can safely say that each has been an improvement on its immediate predecessor. The Biblical Literature as well as the other departments, is kept up to date. All the recent discoveries are noted in their proper places, and the work is the best exponent of the topics of which it treats, so far as it has gone, which has yet appeared or is likely to appear.

Another contribution to biblical and geographical literature is a very beautiful American edition of *Dr. Tristram's "Land of Moab."* Among the host of English scholars and explorers, who, under the direction of the Palestine Exploration Committee, the Royal Geographical Society or the British Association for the Advancement of Science, have undertaken the exploration of the Holy Land, no one has developed in larger measure the enthusiasm mingled with sound judgment, the ability to weigh carefully all testimony before coming to a conclusion, and the readiness to undergo all hardships for the sake of science, than Canon Tristram. In this expedition he was taken prisoner, and robbed more than once by the wild Bedouin tribes east of the Dead Sea;

but his zeal was not in the least abated by these mishaps. His discoveries are of great interest. The American edition is admirably printed and illustrated, and the work one of remarkable value to all readers interested in Palestine discovery and exploration. The discovery of the palace of Māshitā, an Oriental ruin of wonderful beauty, and which Canon Tristram and Mr. Ferguson regard as one erected by Chosroes II in the seventh century of the Christian era, the exploration of the Castle of Machærus, where John the Baptist was imprisoned by Herod; and of the ancient fortress of Masada, were achievements which amply repaid the cost and labor of the expedition.

One other recent publication demands notice, *Hervey's* "Christian Rhetoric." Though primarily intended for the use of clergymen and theological students, there is no teacher or public speaker or writer who will not be benefitted by the careful reading of this decidedly original treatise. The work is not without faults, both in matter and manner, but his mode of treatment of rhetorical science is so novel and in the main so just, that the book should command a wide circle of readers and students.

If the past generation of "school marms" could arise from their slumbers, and revisit the scenes of their former labors, we are sure their astonishment at the improvements made, would cause them to forget to use the ruler or to rap our heads with that dreadful thimble. Pleasant rooms and new furniture would excite their wonder, but more than all, the great advance in school-book making. This progress is more noticeable in readers than in other books, probably because of the improved illustrations. "The Franklin Series," consisting of five books, is a triumph in reader making. It is well graded, from the one syllable words of the first book, to the selections of the fifth. These selections are remarkably well made, and their value is increased by short sketches of their authors. The illustrations are unusually good. The girls in sun-bonnets and boys in long aprons have disappeared, as well as the kites and dolls, such as no mortal child ever saw. In their places we have modern-looking children and toys. We have taken the trouble to count, and find that the first book of seventy-two

pages contains one hundred illustrations. They are generally very good, some of them beautiful. The influence upon children of such pictures cannot but be beneficial, and we are happy to see our young people are so well cared for in this respect.

*Rev. E. P. Roe*, author of "Play and Profit in My Garden," has written a book entitled, "What can she do?" It does not pretend to be an artistic work, but is written with the purpose of showing the inability of ordinarily well educated girls to care for themselves. The story is that of a family who lost their money suddenly, and, the father dying at the same time, were obliged to support themselves. Only one, Edith, can be said to meet with much success, the others depending upon her for support. She is a pleasing character, not a perfect girl, nor always an amiable one, but very human. Arden Lacey, who as Hannibal, an old negro, remarks is "quar," is well drawn, and turns out a fine man. Of the other characters there is little to be said, they are sometimes common-place, sometimes overdrawn. We may sum up the matter in a word by saying, that, while the book shows signs of great haste in composition, it is sufficiently readable to do good.

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#### MISCELLANEA.

PROF. F. A. ALLEN, the veteran Institute Conductor, has recently finished his third campaign in Maine. We learn from our correspondence and the press that his series of Institutes for 1873 has been very successful. Prof. Allen's Institute experience has probably been more extensive than that of any other teacher in the world. A most significant fact is, that he is re-called, year after year, to the same places. He is now at work in Pennsylvania. Some locations he is now visiting for the seventh time.

DETROIT has invited the National Educational Association to assemble there next year. The invitation has been accepted by the President, S. H. White, who has named August 4th, 5th and 6th as the date of meeting.

A MAN in Logansport, Ind., subscribed \$5,000 towards founding a Universalist College in that place. Now that the time to pay is come he refuses to keep his word, pleading that he was insane at the time of making the donation. The college authorities have sued to recover the amount.

THE school teachers in St. Louis have not been paid their salaries since the summer vacation, and the sixty-day certificates which they received in lieu of it, they are unable to get cashed.

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### PUBLISHERS' DEPARTMENT.

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**Sir Edwin Landseer.**—Of the great painter, Sir Edwin Landseer, the *Imperial Biography of Art* says: "No English painter has been more popular, and none—except Sir Thomas Lawrence—has received such immense sums for his works. For the copyright of some of his pictures he obtained £3,000 (\$15,000), in addition to the original price of the picture. It was a master stroke when the publishers of *The Christian at Work* presented the triple combination of a magnificent chromo (about two, by two and a half feet in size) of Landseer's great painting of dogs and sheep—"The Twins"—with Talmage as editor of their paper, and Spurgeon as special contributor. They deserve success, and will get it. Write to them, at 102 Chambers street, N. Y., for sample copies and terms. Agents wanted. See their advertisement."

**The Great Events of History**, recently published, is working its way into the best schools all over the country. No agents are required to introduce it. No plausible arguments are necessary to urge its claims. *It is called for!* See advertisement elsewhere.

**To Teachers.**—The special attention of TEACHERS is called to the advertisement of TWO STERLING MAGAZINES in the present number. THE PHRENOLOGICAL JOURNAL, and THE SCIENCE OF HEALTH. The subject to which these are devoted is of special interest to every teacher. To prove this, specimen numbers of each will be sent to every reader of the EDUCATIONAL MONTHLY who will send address, with stamps for postage. Address the publisher, S. R. WELLS, 389 Broadway, New York.

**A Card.**—From Prof. S. S. Packard, of Packard's Business College, N. Y.:—"Instead of going to Europe last spring, as directed by my physician, I went to THE BUTLER HEALTH LIFT. I think I did wisely, and so does the Doctor. I haven't enjoyed such continuous good health and spirits for five years. I am able to do more work in a month than I could last year in three; on account of the rest and vigor which have come from THE HEALTH LIFT."—S. S. Packard.

THE BUTLER HEALTH LIFT is a scientific system of concentrated and cumulative exercise, occupying the briefest time. Preserves and restores Health. Endorsed by the Medical Profession.

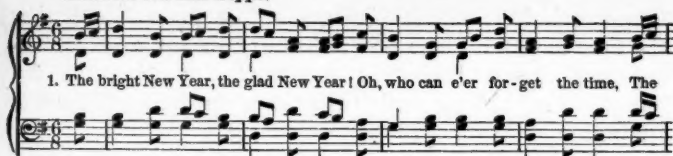
Send for circulars. Descriptive pamphlet 50 cts. New York, Principal Office, *Park Bank, 214 Broadway*; also, 180 Fifth Avenue. Brooklyn, 158 Remsen St. LEWIS S. JAMES, Manager.

**G. P. Putnam's Sons** have in preparation a volume on "The Education of American Girls," edited by Miss Anna C. Brackett, of New York, formerly Principal of the Normal School of St. Louis. It will contain Papers from representative women teachers throughout the country. Contributions are also expected from Mrs. C. H. Dall, Miss Maria Mitchell and Dr. Mary Putnam Jacobi, who will treat especially of the subjects broached in Dr. Clarke's "Sex in Education," and others. The purport of the book will be to show that under a scientific systematization of study, women are competent physically and mentally, to carry on extended courses of study up to the masculine standard.

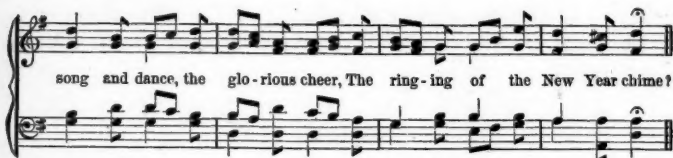
# SONG FOR THE NEW YEAR.

Written and composed by DR. WM. J. WETMORE.

*Moderato ma non troppo.*

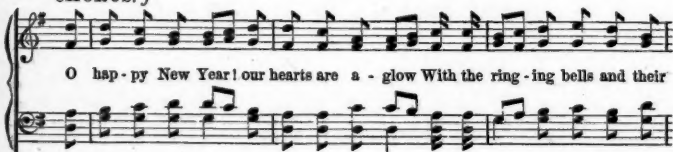


1. The bright New Year, the glad New Year! Oh, who can e'er for-get the time, The



song and dance, the glo-rious cheer, The ring-ing of the New Year chime?

## CHORUS. *f*



O hap-py New Year! our hearts are a - glow With the ring-ing bells and their



mu-st-cal cheer; Hurrah, hur-rah for the sparkling snow, Hurrah for the glad New



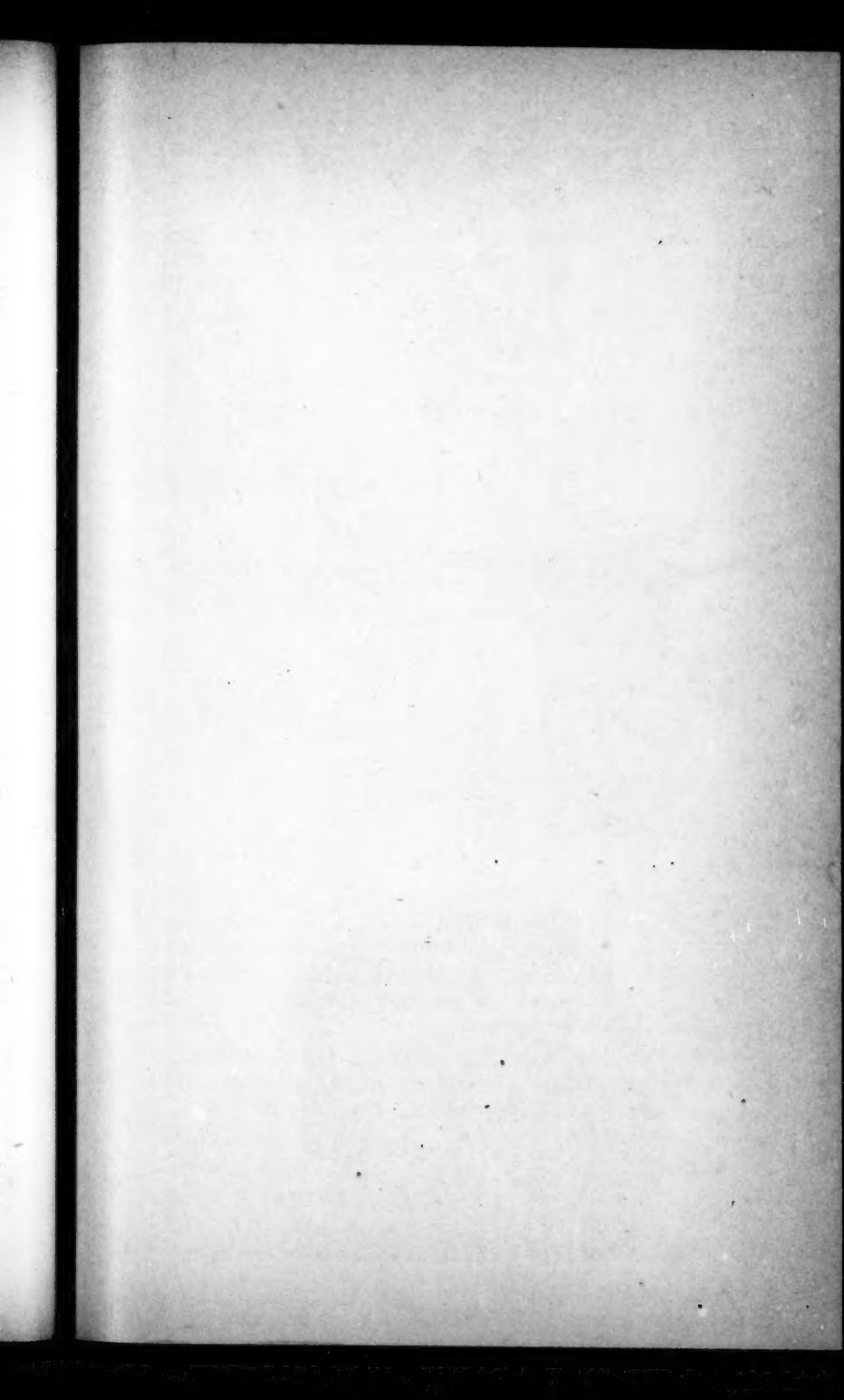
Year. Hur-rah, hur-rah, hur-rah, hur-rah! Hur-rah for the glad New Year!

2 Mourn not for hours forever fled,  
Like them the friends of youth depart:  
What if the Old is with the dead?  
The New Year comes to glad the heart.—*Chorus.*

3 Time will not for a moment stay  
His flight for flagging mortals here:  
The seasons come and roll away;  
Life has its changes like the year.—*Chorus.*

4 The bright New Year, at midnight cold,  
Rings out his merry, joyous chime:  
But soon the Present will be old,  
A footprint on the shore of time.—*Chorus.*







Entered according to Act of Congress in the year 1869, by A. D. FARR, Jr., in the Office of the Librarian of Congress, at Washington.

## "The Old Oaken Bucket."

A Miniature Illustration of the Superb Chromo.

From the celebrated Painting by JEROME THOMPSON.

How dear to this heart are the scenes of my childhood,  
When fond recollection recalls them to view—  
The orchard, the meadow, the deep-tangled wilderness,  
The wide-spreading pond, and the mill which stood by it.

The bridge, and the rock where the cataraet fell,  
The seat of my father, the dairy house right in the well—  
The old oaken bucket—the four-legged bucket—  
The massive old bucket, which hung in the well.